

IOWA DEPARTMENT OF NATURAL RESOURCES

SECTION 401 WATER QUALITY CERTIFICATION

Certification issued to:

Effective: August 29, 2007

City of Ankeny	DRA Properties
220 West First Street	1525 NE 36 th Street
Ankeny, IA 50023-1751	Ankeny, IA 50021

Prepared By: Christine M. Schwake Date Executed: August 29, 2007
Christine M. Schwake, IDNR, Wallace State Office Building, Des Moines, IA 50319-0034 (515) 281-6615

STATE OF IOWA COUNTY OF POLK
I HEARBY CERTIFY I AM THE OFFICIAL AND LAWFUL CUSTODIAN OF THE PUBLIC RECORDS MAINTAINED BY THE IOWA DEPARTMENT OF NATURAL RESOURCES AND THE FOREGOING DOCUMENT IS A TRUE AND ACCURATE PHOTOCOPY OF THE RECORD COPY MAINTAINED IN MY CUSTODY AS A PUBLIC RECORD OF THE DEPARTMENT IN THE ORDINARY COURSE OF ITS BUSINESS.
EXECUTED AT DES MOINES ON AUGUST 29, 2007 BY LESLIE LEAGER (515-281-4790)



Project certified: US Army Corps of Engineers, Joint Public Notice No. CEMVR-OD-P-2006-218
State 401 Water Quality Certification, Application Log No.: 07-D-153-06-01-S

Proposal to construct Phase I of Prairie Trail, an approximately 398-acre mixed-use development in southwest Ankeny (S22, 23, 26 & 27, T80N, R24W, Polk County). Two dams will be constructed on the tributary to Saylor Creek, in addition to grade leveling to create developable lots, the construction of roads and the placement of utility lines. The dams will inundate approximately 3,015' of stream and will create two 4-acre ponds for recreation and storm water detention. Pond outlets will be protected from erosion using stone riprap or cable concrete. The development will include several culverted crossings of the tributary with new roads. Stone riprap will be installed at the culvert outlets for erosion control. Seven regulated emergent wetlands (totaling 2.08 acres) and three non-regulated wetlands (totaling 1.91 acres) will be adversely impacted with the grading or with inundation by the ponds. As compensation for the wetland losses, the applicants propose to create 4.05 acres of emergent wetland. The 4.05 acres of wetland will be created with shallow excavation and blocked drainage. Sources of hydrology for the created wetlands include impounded water from the ponds, drainage associated with existing streams, directed storm water runoff, and direct precipitation. As compensation for stream impacts, the applicants propose to re-slope 2300' of banks, stabilize both banks along 900' of stream, and construct 7 riffles.

Water quality use designation:

This reach of a tributary to Saylor Creek is designated as Class A1 Primary contact recreational use. These are waters in which recreational or other uses may result in prolonged and direct contact with the water,

involving considerable risk of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing. This reach of a tributary to Saylor Creek is also designated as Class B(WW-1) which are waters in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrate species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams. All surface waters in Iowa, including wetlands and those designated for Class "A", "B", and/or "C" are classified for the following general uses: livestock and wildlife watering, noncontact recreation, crop irrigation, and industrial, agricultural, domestic, and other incidental withdrawal uses.

The Iowa Department of Natural Resources (IDNR) has issued this State 401 Water Quality Certification pursuant to Section 401 of the Clean Water Act. The Army Corps of Engineers (Corps) requires state Certification before a Section 404 permit can be issued. Section 401 Certification represents the IDNR's concurrence that the project certified is consistent with the Water Quality Standards of the state of Iowa as set forth in Chapter 61, Iowa Administrative Code. Subject to the attached conditions, incorporated by reference herein, the IDNR has determined that there is reasonable assurance the proposed activities will be conducted in a manner that will not violate water quality standards of the state of Iowa.

GENERAL CONDITIONS

1. Permittee is responsible for securing and for compliance with such other permits or approvals as may be required by the IDNR, federal, state, or local governmental agencies for the project activities described.
2. You are encouraged to conduct your construction activities during a period of low flow.
3. Clearing of vegetation, including trees located in or immediately adjacent to waters of the state, shall be limited to that which is absolutely necessary for construction of the project. All vegetative clearing material shall be removed to an upland, non-wetland disposal site.
4. All construction debris (including the debris found in the streams) shall be properly disposed of in such a manner that it cannot enter a waterway or wetland. Construction equipment, activities, and materials shall be kept out of the water to the maximum extent possible. Equipment for handling and conveying materials during construction shall be operated to prevent dumping or spilling the material into waterbodies, streams or wetlands except as approved herein. Care shall be taken to prevent any petroleum products, chemicals, or other deleterious materials from entering waterbodies, streams or wetlands.
5. Erosion control features (i.e., silt fences, silt ditches, silt dikes, silt basins, etc.) must be installed to provide continuous erosion control throughout the construction and post construction period as well as the revegetation of all disturbed areas upon project completion. Where siltation control features have been reduced in capacity by 50% or more, the features shall be restored to their original condition with a minimum of delay.
6. All disturbed areas not covered with riprap shall be seeded with native grasses, excluding Reed Canarygrass (*Phalaris arundinacea*) or any aggressive or invasive species, during an optimal seeding period. If excavation and construction are completed outside an optimal seeding period, temporary erosion control protection shall be implemented immediately upon completion of excavation and construction and shall be maintained until such time as seeding can be completed during an optimal period. The applicant shall monitor revegetated areas continuously to assure success of revegetation. If rye is initially planted to stabilize the soil then native warm season grasses shall be planted during the following growing season.
7. Riprap shall consist of clean native fieldstone, clean quarry run rock or clean broken concrete. If broken concrete is used all reinforcement material shall be completely removed from it; if removal is not possible, said reinforcement material shall be cut flush with the flat surface of the concrete. It

shall be the applicant's responsibility to maintain the riprap such that any reinforcement material that becomes exposed in the future is removed. The concrete pieces shall be appropriately graded and no piece shall be larger than 3 feet across the longest flat surface. No asphalt or petroleum based material shall be used as or included in riprap material.

8. The culverted crossings will use over-sized, partially buried pipe. The pipes will be installed in such a way to allow for naturalizing with in-stream substrate while maintaining adequate flow volume.

MITIGATION CONDITIONS

1. The wetland mitigation shall be completed by 12/31/2008 and the stream mitigation shall be completed by 12/31/2009. As-built plans (one for the wetland mitigation site and one for the stream mitigation site) shall be submitted to the IDNR and to the Corps upon completion. The 4.05-acre replacement wetland shall be monitored annually and managed to confirm whether it has successfully replaced the function and values of the impacted wetlands after a five-year period. If, at the end of the fifth year, the expected water level is not achieved, more than 50 percent of the emergent vegetation are non-native species, or if evidence exists that the replacement wetland is becoming less effective, then additional monitoring and/or corrective actions shall be taken to achieve the compensation ratio as originally approved. Annual monitoring reports shall be submitted to the IDNR and to the Corps' office by December 31 for at least five years following planting.
2. The applicants will create 4.05 acres of emergent wetland to compensate for the impacts to 2.08 acres of regulated wetland and 1.91 acres of non-regulated wetland. (The emergent mitigation wetlands will be seeded with emergent vegetation.) As compensation for stream impacts, the applicants propose to re-slope 2300' of banks, stabilize both banks along 900' of stream, and construct 7 riffles.
3. Future development or land-use conversion of the wetland mitigation area, or any part thereof, for any purpose which may interfere with or be detrimental to wetland functions, is prohibited without prior written approval from the IDNR and the Corps. Within 1 year of the date of issuance of the Section 404 permit the applicant shall, with the knowledge and approval of the property owner of record, file a copy of this certification in its entirety with the County Recorder for entry into the property records, thereby notifying all parties of this restriction. Further, prior to commencement of construction, said applicant shall provide the IDNR and the Corps with a "Filed" stamped copy of this certification. If the certification cannot be filed in the manner indicated, the applicant shall provide the IDNR with documentation of agreements, contracts, etc., demonstrating to the IDNR's satisfaction that the wetland mitigation site will be protected from future activities that may interfere with or be detrimental to wetland functions and values to a level of assurance equivalent to that provided by the aforementioned filing process.
4. The annual site surveys of the mitigation site shall assess the vegetation, hydrology, and soils. The results of each survey will be documented in an annual monitoring report. Annual monitoring reports shall be submitted to the IDNR and to the Corps by December 31 for at least five years following planting. The reports must include photos, a vegetative cover map indicating dominant species in each area, an assessment of wetland hydrology according to the 1987 Corps of Engineers Wetland Delineation Manual ('87 Manual), a map with drawn boundaries indicating exactly what areas are wetland according to the '87 Manual, and any corrective actions taken or needed. All maps must be to scale and have the scale plainly labeled.
5. The City of Ankeny and DRA Properties shall assume all liability for accomplishing any needed corrective work. Corrective work will be required if 4.05 acres of emergent wetland not develop as wetland (according to the '87 Manual) or if the Corps determines that the stream or wetland mitigation sites are not developing satisfactorily. Remedial work may include grading and/or planting the mitigation site, or may require a new mitigation site. Corrective action may also require additional monitoring.